





Regional Workshop on Editing (Data Cleansing) of Statistics produced from Administrative Registers

**Working with Administrative Agencies** 

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**GCC-Stat** 







- Use of Administrative Data in Statistical Systems
- Relationships
- Managing Differences



# Use of Administrative Data in Statistical Systems in GCC Countries (1)



#### Aggregates

Single Register Source

Multiple Registers (or Registers and Survey results)



Marriage and Divorce Statistics External Trade Statistics

Health Statistics
Culture Statistics
Labour Statistics



# Use of Administrative Data in Statistical Systems in GCC (2)



#### Statistical Registers

- Use Unit Records
- Created from Administrative Registers
- Multiple Registers linked using Identifiers
- May involve linking Registers and Survey (census) data

Statistical Registers created from (Linked) Administrative Registers

Linked Statistical Registers and Survey (Fieldwork) Data



2020 Census, Business Register

2020 Census, Business Register



## **Evolving Use of Administrative Data**



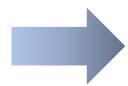
#### System Approach

Coordinated and Integrated Register System

Administrative Based End to End Statistical System



Future for many GCC statistical systems
Now in many European countries



Integrated Data Infrastructure - providing access to researchers for de-identified administrative based data



### **Increasing Complexity**



Single Register Multiple
Registers (or
Register and
Survey
results)

Linked Statistical Registers Linked Statistical Registers and Survey Data Coordinated Register System Administrative Based System – Integrated Data Infrastructure

Aggregates

**Linked Statistical Registers** 

System Approach

### Complexity



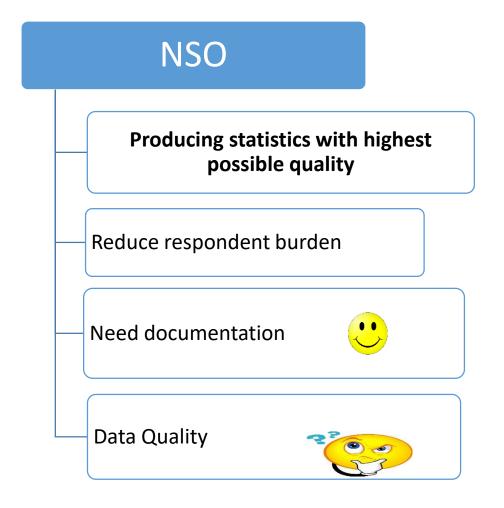


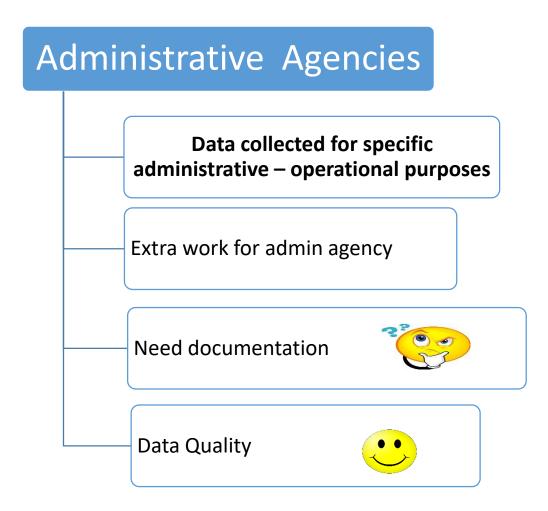
## Relationships



# Perspectives on using Administrative data for statistics









### **Implications**



| NSO – must have  | Agencies must have   |
|--|--|
| Strategic Leadership (including internal alignment) Clear Roles and Responsibilities (Internally, with Agencies) Strong Relationships with Agencies Documentation and Metadata guidelines Appropriate Governance Effective Communication | Good understanding of how data will be used Clear Requirements from NSO Clear Agency Roles and Responsibilities Relationships with NSO built on trust Effective Communication Appropriate involvement in Governance Understanding of NSO Perspective |
| Understanding of Agency Perspective  |  |



### Co-operation with administrative authorities



- Legal basis
  - but that is not enough
- Active cooperation
  - Permanent cooperation committees with administrative agencies
  - NSO member of government committees on "ICT coordination"
  - Joint working group on administrative data quality
  - Statisticians seconded from NSO to work with agencies to improve data quality
  - Agency staff seconded to help NSO understand the administrative registers
  - Joint statistical reports





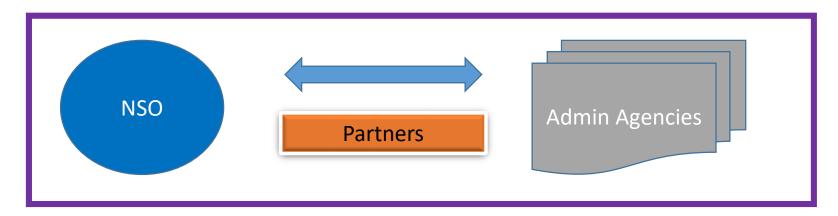
## **Managing Differences**



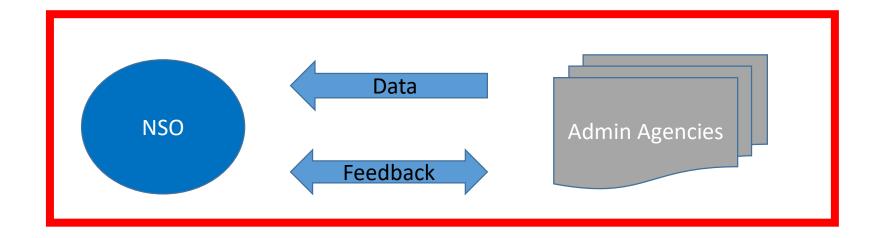
### **Context**



#### Relationships



#### <u>Feedback</u>

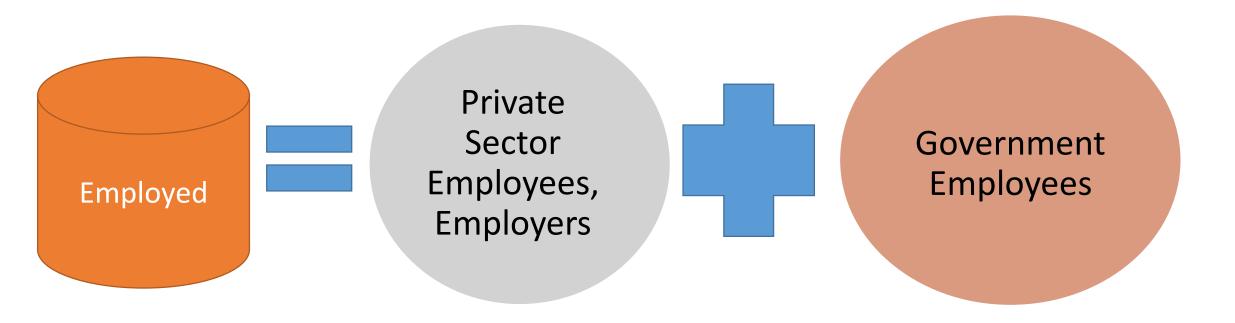




### Example – Counting the Employed in Census



### **Census** – count everyone once and only once



### **Maybe Not**



### **Conceptual Differences (1)**



#### Census definitions must meet SNA framework

Private
Sector
Employees,
Employers

Government Employees

#### **Private Sector**

- Government owned companies
- Privatised Government companies
- Contractors
- Self- Employment

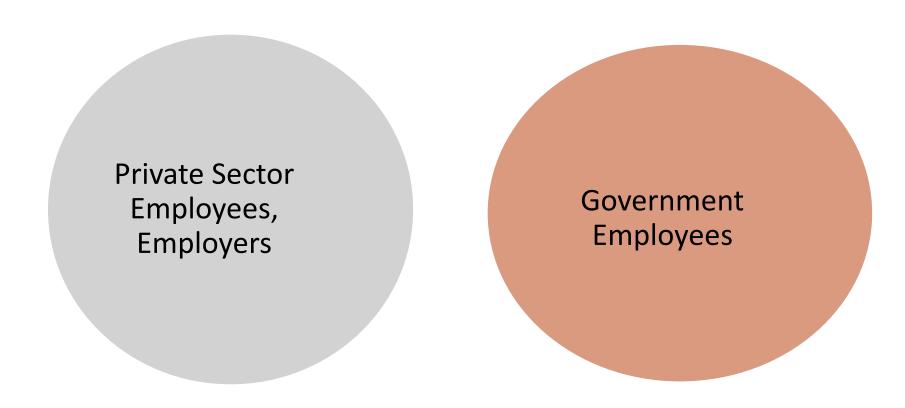
#### **Government Employees**

- Military, Security Sector, Police
- Government owned companies
- Privatised Government companies



### **Conceptual differences (2)**



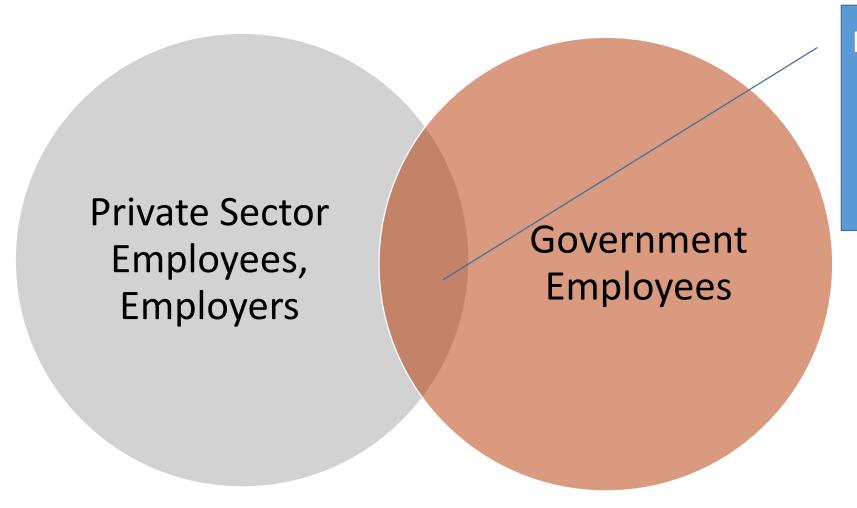


Is everyone a usual resident??? – Statistical not Administrative



### Possible overlaps





How many people in the Government also have private sector jobs? Eg Own company??

count everyone once and only once





What about??? **Private Sector** Employees, **Employers** Household Workers

Government Employees

count everyone once and only once



### **Quality Feedback**



### Systematic Quality Issues - YES

- Supply
- Coverage errors regions, parts of population expected to see on register
- Coding
- Data Entry
- Consistency errors within administrative registers
- Metadata

#### Feedback about Individual records - NO

- Critical for maintaining public acceptance
- Statistical rules not same as Administrative rules
  - Eg Who is a usual resident?

Fundamental Principles of Official Statistics

Principle 6. Individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes



### **Discussions with Agencies**





- 1. Differences between Statistical and Administrative...
  - 1. Purposes
  - 2. Concepts
  - 3. Processes
  - 4. Outcomes
- 2. Quality Feedback
- 3. Before, During and Afterwards

We need to talk!!









### **Feedback**



- Differences don't mean that the administrative system or administrative data is wrong
- >Administrative and Statistical needs are different

 Important that differences are clear in the metadata – but also explained to key stakeholders